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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,366	09/30/2003	William Dean McConnell		9517

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WILLIAM DEAN MCCONNELL  
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EXAMINER

DEODHAR, OMKAR A

ART UNIT PAPER NUMBER

3714

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/675,366

Applicant(s)

MCCONNELL, WILLIAM DEAN

Examiner

Omkar A. Deodhar

Art Unit

3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/30/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferguson (US Patent No. 6,146,283) in view of Witler (US Patent No. 5,486,002).

Regarding claims 1 and 2, the Ferguson reference discloses a golf putting training device to assist golfers in practicing their respective putting strokes. The device

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comprises of the following: A housing frame (Figure 1, 24); a target strike area which serves as a putting target (Figure 1, 30); a sensor that measures the putting force applied to the putting target (Abstract); a stimp selector that can be selected for various stimp values (Abstract); electronic circuitry including a microprocessor that receives a putting force signal from a sensor (col. 4. lines 36-44) and also determines the potential putting distance based on the applied force and desired stimp value (Abstract); and a display for communicating the potential putting distance to the golfer. Please note that a microprocessor could be considered electronic circuitry and a peripheral computing device, if so desired.

The Ferguson reference, however, does not teach the following: An impact of a rolling golf ball, impact absorbing material, a Doppler measurement sensor and associated circuitry, a microcontroller to receive Doppler signals and determine the potential putting distance based on a rolling golf ball.

Witler discloses a golfing apparatus with the following features: Apparatus can be used with a net to absorb the impact of a golf ball, (col. 9. lines 27-30 & col. 10. lines 21-22, & 44), where it is noted that a net serves as impact absorbing material for either a ball in trajectory or rolling motion; the use of a Doppler system with a transmitter and receiver unit, and correlating circuit to determine the speed and carry distance of a ball in trajectory, (col. 9. lines 46-67 & col. 10. lines 1-3); to determine the speed and carry distance of a ball in trajectory by using the Doppler effect to count the pulses over a time interval (col. 9. lines 60-67 & col. 10. lines 1-3), where it is noted that the correlating circuit used in the Doppler system is considered a microcontroller.

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One skilled in the art will readily recognize the potential value of such golf training devices, whether one is practicing putting or driving, in a simulation or striking manner. One skilled in the art would also recognize that there are other characteristics associated with a favorable putt or a favorable drive; that the stimp selection and striking of the ball versus a simulated strike does not fully and accurately guarantee the putting or driving distance predicted by such devices. Furthermore, one skilled in the art would recognize the benefit of a golf training device that would support both rolling balls, as in the case of a putt, and a ball in trajectory. It is further noted that one skilled in the art would not be limited to combine the various parameters such as stimp selection, Doppler speed measurement signals, and impact signals in a single microcontroller unit.

The use of Doppler technology is well suited for monitoring golf performance because it can cover large cross-sections of space, namely the various trajectories that the golf ball can take. Furthermore, the Doppler system is more portable and less expensive than other mechanisms used in the field. Finally direct speed measurements increase the accuracy of the predictions made.

Therefore it would have been obvious to one skilled in the art at the time of Ferguson's disclosure to predict the distance of a put, to vary the stimp of the green, to require striking the ball, and to make direct speed measurements using Doppler technology.

3. Claim 3 is rejected as being disclosed by Ferguson in view of Witler, as discussed above.


**Conclusion**

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Eccher discloses a method and apparatus for determining a desired parameter of motion of an object such as the estimated carry distance of a golf ball.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Omkar A. Deodhar whose telephone number is 571-272-1647. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on 571-272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
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SUPERVISORY PATENT EXAMINER  
TC3700